## SIEMENS

## Data sheet

## 6AV7230-0CA20-1CA0



\*\*\* no longer available \*\*\* SIMATIC IPC377E (basic panel PC) 12" Touch; Celeron N3160 (4C/4T); 4 GB RAM; 256 GB SSD; 1x display port graphic; 1x VGA port graphic; 2x 10/100/1000 Mbps Ethernet RJ45; 2x USB 3.0; 2x USB 2.0; 4x serial ports (COM); 1x mPCle slot; 1x mSATA slot; Windows 7 Ultimate 64-bit; 24 V DC power supply; built-in unit

Figure similar

Installation type/mounting	
Mounting	Panel mount and VESA, horizontal and vertical
Design	Panel PC, built-in unit
Supply voltage	
Type of supply voltage	24 V DC
Mains buffering	
<ul> <li>Mains/voltage failure stored energy time</li> </ul>	10 ms
Processor	
Processor type	Intel Celeron N3160
Drives	
Hard disk	1 TB HDD
Memory	
Type of memory	DDR3L
Main memory	4 GB (pre-installed)
Capacity of main memory, max.	8 Gbyte
Hardware configuration	
Slots	
free slots	1x mPCle (half-size), 1x mSATA (full-size)
Number of PCI slots	0
Interfaces	
Number of industrial Ethernet interfaces	2; 2x RJ45 (independent)
Number of PROFINET interfaces	2
USB port	2x USB 2.0, 2x USB 3.0 (high current)
Video interfaces	
<ul> <li>Graphics interface</li> </ul>	1x DisplayPort, 1x VGA
Industrial Ethernet	
<ul> <li>Industrial Ethernet interface</li> </ul>	2x Ethernet (RJ45)
— 100 Mbps	Yes
— 1000 Mbps	Yes
Protocols	
Protocols (Ethernet)	
• TCP/IP	Yes
Integrated Functions	
Monitoring functions	
Temperature monitoring	Yes
Watchdog	Yes
Status LEDs	POWER, HDD
• Fan	No
EMC	

Interference immunity against discharge of static electricity	
Interference immunity against discharge of static electricity	±6 kV contact; ±8 kV air (to IEC 1000-4-2; ESD)
Interference immunity against high-frequency electromagnetic field	ls
Interference immunity against high frequency radiation	10 V/m for 80 1 000 MHz, 80 % AM according to IEC 61000-4-3; 3 V/m for 1.4 6 GHz, 80 % AM according to IEC 61000-4-3
Interference immunity to cable-borne interference	
Interference immunity on supply cables	$\pm 2$ kV (according to IEC 61000-4-4, burst); $\pm 1$ kV (according to IEC 61000-4-5, surge pulse/line to line); $\pm 2$ kV (according to IEC 61000-4-5, surge pulse/line to ground)
<ul> <li>Interference immunity on signal cables &gt;30m</li> </ul>	±2 kV acc. to IEC 61000-4-4, burst; ±2 kV acc. to IEC 61000-4-5, surge
<ul> <li>Interference immunity on signal cables &lt; 30m</li> </ul>	±1 kV acc. to IEC 61000-4-4, Burst
Interference immunity against voltage surge	
asymmetric interference	±2 kV acc. to IEC 61000-4-5, surge asymmetric
symmetric interference	±1 kV acc. to IEC 61000-4-5, surge symmetric
Interference immunity to magnetic fields	
<ul> <li>Interference immunity to magnetic fields at 50 Hz</li> </ul>	100 A/m; to IEC 61000-4-8
Degree and class of protection	
IP degree of protection	IP40
IP (at the front)	IP65
IP (rear)	IP40
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
EAC (formerly Gost-R)	Yes
FCC	Yes
Dust protection	Protection against foreign bodies > 1 mm
Ambient conditions	
Ambient temperature during operation	
• min.	0 °C
• max.	45 °C
Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	60 °C
Relative humidity	
Relative humidity	Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5 $\%$ to 85 $\%$ at 30 °C (no condensation), storage / transport: 5 $\%$ to 95 $\%$ at 25 / 55 °C (no condensation)
Vibrations	
<ul> <li>Vibration resistance during operation acc. to IEC 60068- 2-6</li> </ul>	tested according to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm; 58 Hz to 500 Hz 9.8 m/s² (1 g)
Shock testing	
<ul> <li>Shock load during operation</li> </ul>	Tested according to IEC 60068-2-27: 150 m/s <sup>2</sup> , 11 ms
Operating systems	
pre-installed operating system	Windows 7 Ultimate (Multi-Language) 64-bit
pre-installed operating system	
Windows 7	Yes; Ultimate 64 bit, SP1
Dimensions	
Width	320 mm
Height	225.6 mm
Depth	95.2 mm